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BY THE HEALTHY.

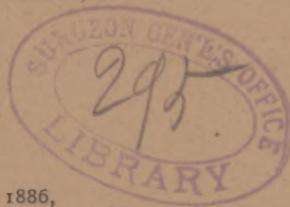
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ABUSE OF ALCOHOLICS.

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MEDICAL SCIENCE ON THE ABUSE OF ALCOHOLICS BY THE HEALTHY.

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While impure air, befouled as it so often is by ordinary pollutions as also by the poisons of specific diseases, holds the first place among the causes of avoidable disease and death, the second place probably belongs to the abuse of alcoholics. There are two other considerations which render the presentation of this subject by the sanitarian exceedingly important. Religion, morality, and even politics mingle their cries with the voice of hygiene, and give birth to partisans, who, misled by sentiment and prejudice, pervert the facts. Farther, modern research is constantly contributing to our knowledge additional facts, and a recapitulation from time to time of the subject, especially of the facts bearing on the questions most discussed, is a duty owed by hygiene to the public. With this view, the following article is contributed. It attempts to present in untechnical terms, for the benefit more especially of non-medical readers, the facts concerning the abuse of alcoholics by the healthy, as taught by medical science, and particularly by physiology, pathology, and hygiene.

The first question to be considered is, *What are alcoholics?* All drinks containing alcohol are called alcoholics, for they owe their power and their use to the alcohol they contain. They are divisible into three chief classes, viz.: malt liquors, as beer, ale, porter; wines, as claret, hock, champagne, sherry, and port; and spirits, as whiskey, brandy, rum, and gin.

Spirits, often termed ardent spirits and distilled spirits, were formerly called "strong waters," and by our Indians "fire-water." All spirits are products of distillation, while the much simpler and much older process of fermentation produces wines and malt liquors. These last contain least alcohol ($1\frac{1}{2}$ to 10 per cent., and averaging less than 5 per cent.), and are therefore the least injurious; spirits contain most alcohol (40 to 60 per cent., whiskey and brandy containing about 50 per cent.), and are the most injurious; and wines contain much less than spirits (8 to 25 per cent.), and are much less injurious. The various alcoholics differ one from another in important particulars; but the ques-

tion of much the greatest consequence respecting any given alcoholic is, What amount of alcohol does it contain? This has been sufficiently answered for my purpose.

PHYSIOLOGY. HISTORICAL.

The physiologist, investigating the influence on man of anything, seeks instruction from the history of its use. Therefore, a few facts on this subject will be cited. The Fire Worshippers and Brahmins, in the earliest dawn of history, sanctified the "moon-plant," which yielded an intoxicating juice; they declared it a gift of the gods, and employed it in sacred rites. Wine and beer have been in use as far back as man's historical records extend. Egyptians, Greeks, and Romans regarded these intoxicating drinks as given by the gods to drown care and to stimulate dulness into ecstatic pleasure. They gratefully ascribed these gifts to special gods, whom they represented reeling drunk with sacred libations, and whose praises they chanted in drunken religious processions and at riotous feasts. Odin, Scandinavia's god, drank nothing but wine, and his Norsemen, dreaming of perfect bliss, imagined their Walhalla to be a heavenly paradise, where the happy souls of fallen heroes passed their days in battle and in the chase, and their nights in alcoholic revelry. From such nations much of our civilization has been derived; and this civilization was tainted with alcoholic abuse.

Has our religion specially tended to enforce abstinence from alcoholics? Out of all who lived before the Deluge, there was only one of the Hebrews, from whom our religion descends, who "found grace in the eyes of the Lord" because of his "righteousness." Yet, as soon as the fall of the murderous flood permitted, the miraculously rescued Noah "planted a vineyard; and he drank of the wine, and was drunken." Further, the righteous Noah, when he "awoke from his wine," said to his son Ham, the father of the people of Canaan, "Cursed be Canaan; a servant of servants shall he be unto his brethren;"—and thus our forefather cursed his own son and descendants, because, alas! *solely* because the son had failed to respect his father's drunkenness. After Noah's time, Solomon lauded wine to the Hebrews, as follows: "Give strong drink unto him that is ready to perish, and wine to those that be of heavy hearts; let him drink, and forget his poverty, and remember his misery no more;" and he also commended wine in that it "maketh glad the heart of man;" but added the wise king, "at the last it biteth like a serpent, and stingeth like an adder."

Christianity strictly enjoins temperance in all things. However, Christ consecrated wine to the use of his most solemn sacrament, and the beginning of those miracles which "manifested forth his glory" was the conversion, at his mother's request, of many (90 to 135) gallons of water into "good wine," for the gratification of the guests at a wedding festival. After Christ's time, St. Paul thus advised the elders of the church: "Drink no longer water, but use a little wine for thy stomach's sake

and for thy often infirmities ;" and physicians still teach that alcoholics are serviceable, especially in the debility of old age.

Three religious faiths now share with Christianity the allegiance of the great masses of mankind ; the Buddhists outnumber Christians, and the Brahmins and Mohammedans combined equal them. One of Buddha's ten commandments forbids the use of intoxicating drinks, the Brahmins denounce their use as one of their five great sins, and Mohammed prohibited such drinks as an abomination. While the followers of these faiths indulge in the more baneful vice of intemperance in opium and in hashish, they are comparatively free from alcoholic intemperance, a vice which especially characterizes Christians.

Although wine and beer have been used and abused in all times, yet spirit drinking is a comparatively modern vice. Alcohol was not discovered until the seventh century ; the distillation of spirits from wine was not discovered until the twelfth century, and spirits did not come into common use as drinks until the fifteenth, sixteenth, and seventeenth centuries, the period varying with different nations. The earliest records I have found as to the use of spirits are as follows :—Some time after 1450, distilled spirits first came into use in Sweden, and they were abused to such an extent that in 1494, and repeatedly thereafter, their use was prohibited by law. About 1520, the Irish usquebaugh, or whiskey, began to acquire reputation in England. Prior to 1616, spirits must have been known in Spain, as Cervantes's *Sancho Panza* got into trouble through Jamaica rum. In 1650, the Connecticut Blue Laws restricted the sale of beer, wine, and "*strong water*." Not until about 1655 did the consumption of French brandy become great in England, and Jamaica rum not until 1688. The historian Macaulay states that about 1692, a year of hard times, punch made of brandy and lemons began to be used, instead of wine, on the tables of the English gentry ; however, Thackeray's "*Henry Esmond*," which depicts their social life from 1691 to 1718, is full of drunkenness, but not with spirits.

The English words brandy and whiskey are probably less than three centuries old, and the common use of these articles as drinks is less than two. Finally, it deserves notice that whiskey is derived from a word which signified "*the water of life*," and that to this day the French, the Italians, and some English medical books continue to designate brandy by words which also signify "*the water of life*." Thus, from the earliest times to the present, men have been in the habit of regarding alcoholic drinks either as god-given or as life-giving blessings to mankind.

This brief historical sketch renders it obvious that for many centuries our forefathers have imbued their descendants with faith in the health-giving virtues of alcoholic indulgence. Who can expect the results of such long-continued convictions and customs to be eradicated easily or promptly, and what wonder is it that men continue to credit alcoholics with many virtues which they do not possess ?

INSTINCT FOR ALCOHOLICS.

So long and so general has been the use of alcoholic and other stimulants, that most authorities, even some distinguished physiologists, have hastily attributed this use to a "universal and imperious instinct." Man has not been diabolically cursed with any such instinct; he has no instinct which is not possessed by other animals, and all these have a natural aversion to alcoholics. They are repulsive to children, unless disguised by mixture with sugar or other harmless substances for which the child has a natural appetite. Our Indians, the Australians, the Hottentots, and other savages, cultivating neither grain nor fruits, and ignorant of the processes of fermentation and distillation, lived in health without alcoholics and without any instinct for them, until civilized white men taught them how a healthy aversion could be perverted by vicious habit and even debased into an overpowering morbid appetite. Millions of civilized white men and a much greater number of women have proved, by healthy, happy, laborious, and prolonged lives, that milk and water are the only fluids essential to man, and that alcoholics are not only unnecessary, but also are not instinctively sought for. It is, then, very certain that man's love for alcoholics is not an instinct, in the proper sense of this word.

However, the desire for alcoholics, though not itself an instinct, has its origin in the most powerful and beneficent instinct which man possesses in common with all other animals,—the instinct which prompts animals to seek pleasure and to avoid pain. While stoics, ascetics, and other moralists have taught that man should avoid pleasure and welcome pain, physiologists insist, on the contrary, that the welfare of body and mind and the preservation of life itself depend on our guidance by the promptings of pleasure and of pain. While pleasure teaches what we should seek, pain has two uses: first, it serves to reënforce the lesson of pleasure when its promptings have been disregarded; and, second, pain teaches us what must be avoided in order to preserve health, life, and happiness. While many complainingly wonder why a merciful God should have afflicted man with pain, physiologists wonder, on the contrary, how animal life could possibly exist without it. Consider the following facts: Pleasure or desire for pleasure prompts man to eat, to drink, to breathe, to sleep, to take exercise, to seek warmth, to beget children, and even to follow the road to heaven. If pleasure fails to induce us to obey its promptings, then nature forces us to obedience by the pains of hunger, thirst, suffocation, exhaustion, indisposition, cold, and lust. Farther, pain or desire to avoid it keeps the burnt child out of the fire, it teaches us to protect ourselves from all bodily injuries, to restrain injurious excesses of pleasure, to avoid all causes of mental distress, and to hold back from the agonies of hell. Pain is the greatest of all the teachers of duty and of respect for the rights of others, as is illustrated by the proverb, "Spare the rod and spoil the child." Pain itself, whether of body or mind, impairs health and happiness, while pleasure promotes

them. Therefore, it is right to do that which in most things we all habitually do do, namely, obey the promptings of present pleasure and of present pain.

However, the conditions of existence are such that all animals are at times so circumstanced that at one time they must forego present pleasure in order to avoid future pain, and at another time they must endure present pain in order to secure future pleasure. Civilization has constantly tended to increase the struggle for existence, and therefore the number of the conditions which necessitate the sacrifice of present pleasure and the endurance of present pain in order to secure a larger amount of pleasure in the future; and those who fail to practise this lesson of self-denial will find that either they or civilization must go to the wall. Hence the savage, who had lived in cities, returned to his woods declaring that he had "tried civilization and found it was not worth the trouble."

For such reasons, physiologists teach that a beneficent law of nature requires man to be guided by the promptings of pleasure and of pain; but that circumstances frequently force him to disregard these promptings for the time being, in order that he may in the future avoid more pain than he temporarily endured, and secure more pleasure than he temporarily sacrificed. The wise man will calculate well the chances, and will be led where he believes, after due consideration of both the present and the future, that the greatest pleasure and the least pain will be found.

If I have taught the truth, then it is plain why men "put an enemy in their mouths to steal away their brains." Have not men been taught, from the earliest times, that alcoholics give pleasure and drive away pain? Solomon, twenty-eight centuries ago, sang of wine, that it "maketh glad the heart of man;" "Let him drink and forget his poverty, and remember his misery no more." In this century a great poet has sung of whiskey,—

"'T will make a man forget his woe,
'T will heighten all his joy."

And all remember the cause why, though

" Kings *may* be blest, Tam was glorious,
O'er a' the ills o' life victorious."

Our best prose and poetry bedeck alcoholic abuse with their brightest gems of wit and merriment. From childhood, jolly voices have tempted us with such rollicking songs as "Dum vivimus, vivamus," and "We won't go home till morning;" and thousands of children are still being constantly misled, by precept and example, at home and abroad, to regard alcoholics as man's best companion in pleasure and his most trusty panacea in sorrow and in pain.

So long as men believe that alcoholics increase pleasure and lessen pain, they will drink them. Nothing can stop their abuse except a profound and universal conviction that all the immediate pleasure given and

all the pain momentarily taken away are far more than counterbalanced by the pain ultimately inflicted. Before considering the evidence that infinitely more pain than pleasure comes from alcoholic abuse, it must first be inquired, What constitutes abuse?

ABUSE OF ALCOHOLICS.

It is only within recent years that science determined, with something like accuracy, what constituted an abuse of alcoholics. Repeated experiments, on robust, healthy men, have proved that not even the strongest of these can exceed in a day more than two ounces—that is, only four table-spoonfuls—of alcohol, without diminishing their capacity for work, and therefore their usefulness and health. If not subjected to severe tests, strong men may for a long time take a larger quantity without apparent, but not without real, injury. Whoever does not die before his time, and yet habitually drinks more than two ounces of alcohol daily, will very surely have to pay for it in pains far harder to bear than those inflicted by payments in cash. While two ounces daily are the maximum, strict moderation or temperance requires that even strong, healthy men should not exceed one and a half ounces of alcohol daily. This amount is equivalent to the following quantities of our ordinary alcoholics, namely, to one and a half pints of beer or ale; to three fourths of a pint of claret, champagne, and hock; to seven ounces of sherry or port; and to three ounces, or only six table-spoonfuls, of whiskey or brandy.

These small quantities will be derided by every old toper in the land, and by many, too, who are not topers; but derision can never refute scientific experiments and observations carefully and skilfully made. How much these quantities are generally exceeded appears from the fact that there are many men, who, though never drunk in their lives, and therefore are now considered moderate drinkers, yet daily or frequently double and even treble the quantities above indicated as the maxima permitted by strict moderation. All these are wasting their vital capital; and the day will come, as surely as they live, when they will collect smaller dividends of health, and at last be taught what bankruptcy of life before a man's time means. Science has not as yet gathered proofs that any injury to health and life is inflicted on the majority of those who do not abuse alcoholics by exceeding strict moderation, as above defined. But science is not needed to warn us that the transition from strict moderation to injurious indulgence is frightfully easy;—so easy, that while no one intends to become a drunkard, yet many do; so easy, that not even the temperate habitual drinker can consider himself safe unless he applies to himself, at least once a year, the test of total abstinence. Alcoholics are so seductive that they tempt to excesses even the wisest and most resolute men, who, if they indulge habitually, are forced to endure for self-protection the pain of frequent self-denial, which largely counterbalances all the pleasure they receive. Most men are neither wise nor resolute, and, incapable of the requisite self-control, illustrate in multitudes that “Fools rush in where angels fear to tread.”

ALCOHOLICS AS STIMULANTS.

In medicine, alcoholics are termed stimulants; and it unfortunately results that most men, and even some doctors, think that this means that alcoholics give a man strength. One of the highest medical authorities correctly defines stimulants to be medicines "which seem to increase our vital powers for the time being, and thus give us feelings of greater strength and comfort." Now, alcoholics do seem to give a man strength, and so does a spur seem to give a horse strength; but, in fact, alcoholics no more give strength than the spur. The spur irritates the horse to use, and therefore to show for a moment, more of the strength which he already had than he would otherwise have done; but, if a good horse, the more he is irritated by the spur the sooner will his strength be exhausted. Alcoholics affect a healthy man as the spur does a good horse: however, the alcoholic spur usually exhausts a man's strength much sooner than the iron spur exhausts a horse's. The common belief that alcoholics give a man strength is as groundless as would be the belief that strychnine gives strength because it produces violent convulsions; or the belief that irritation of a chicken's spinal cord, by wringing its neck, gives strength to its jumping, headless body. Alcohol intoxicates and influences all animals as it does man; and repeated experiments have proved that it requires but little alcohol promptly to benumb and paralyze both muscle and nerve, the two tissues on which strength depends.

Chloroform, chloral, and ether stimulate like alcohol; and all four are also anaesthetics or pain-killers, and narcotics or sleep-producers. Alcohol exceeds the others in the greater duration of its stimulating action, and in the much larger quantity required to produce insensibility, unconsciousness, and death. In fact, the great prevalence of alcoholic abuse is due to the superiority of alcohol over all other substances in the fact that there is nothing else which cheers so long with so little detriment to the body. The extent to which its abuse can be frequently repeated, without apparent detriment, is often astounding; and, unfortunately, the worst bodily injuries which alcohol inflicts are usually separated by such a long interval from the first abuses which originated them, that the victim is apt to be deluded into the suicidal belief that his abuse of alcohol has not been the cause of his ailments. Hence, it is very difficult to convince those who drink, especially inexperienced youths, that alcohol, when abused, is an exceedingly sure poison, however slow its action may be. It is equally difficult to convince beginners that alcohol is so insidiously seductive, that the habit of indulgence stealthily gains possession in spite of the indulger's intention and determination to the contrary; and that the habit, once formed, binds the victim with the strongest and cruelest "hooks of steel."

There is abundance of evidence that, although alcoholics *seem* to give strength, they in truth do not; and therefore, though useful to the sick, they are unnecessary to the healthy, constituting for these no more than

an agreeable luxury,—a luxury which has done more harm than any other indulged in by civilized Christians. Prior to and within this century, circumstances have repeatedly forced men totally to abstain from alcoholics at times when they were long subjected to the most arduous labors men have ever undergone. The longest marches, the most exhausting sieges, the most trying expeditions by land and by sea, now at the equator and now at the poles, have been endured by men without alcoholics: and the testimony is unanimous that all these trials have been endured better without than with alcoholics. Recently, on March 15th, 1884, a little man weighing 138 pounds, Weston, the champion of pedestrianism, and a mighty champion of total abstinence, finished the unprecedented feat of walking 5,000 miles, at the rate of never less than fifty miles a day: and this extraordinary bodily labor was completed, though begun when he was in bad condition, and though he suffered throughout with a sore heel. No abuser of alcoholics will ever prove their usefulness to laboring men by surpassing Weston. In fact, there are but very few occasions when a *little* alcohol may be useful to a laboring man. It may enable him, if taken a half hour before the close of an exhausting day's labor, the better to finish it: it may comfort and revive him if taken at the close of an exhausting task: and it may help to warm and restore him after exposure to intense cold. If the laborer could reserve alcoholics exclusively for such emergencies, sanitarians would not complain.

Bodily labor is certainly best done without alcoholics, but how is it with mental labor? On this subject Mr. Reade published, in 1883, a book which contains the evidence written by 132 of the men most distinguished in science, literature, and art, now living in Europe and America. The conclusions from this evidence are as follows: The only pure brain stimulants are fresh air, water, food, exercise, and bathing: alcohol is of no value to a healthy student; all work under its influence is unhealthy work, and the most vigorous thinkers and hardest brain-workers abstain. The very strong evidence on which these conclusions are based was not needed to convince me of their correctness. For it is my experience that alcoholics are even less needed by brain-workers than by muscle-workers.

Since, then, both bodily and mental labor are better done without than with alcoholics, it is manifest that the healthy do not require them, and would be better off if they denied themselves entirely so dangerous a luxury. Such is unquestionably the conclusion of modern science. The value of alcohol as a medicine is equally unquestionable, and yet it is still common to find doctors who over-estimate its value, and encourage its abuse by the sick.

ALCOHOL AS A FOOD.

Alcohol could not give strength except by nourishing the body as a food; and since it is composed of the same chemical elements as sugar, it would not be strange if alcohol were a food, serving, as sugar does, to

make fat and heat,—two services indispensable to life. If alcohol makes fat, then surely it is unhealthy fat; for it notably tends to cause the same fatty degeneration of the organs of the body which old age causes, to the great detriment of health and life. If alcohol makes heat, then, in doing this, it must interfere with the natural healthy process of making heat; for alcohol promptly causes a decrease in the temperature of the body. Hence, if alcohol be a food, it is certainly an injurious one, which, instead of promoting, impairs healthy nutrition. It is notorious that indulgence in alcohol is apt to cause a constantly increasing craving for it; that, if much be partaken of, even with every variety of food, sickness and death result; and that neither sugar nor any other healthy food injuriously acts in this wise.

Alcohol certainly lowers the temperature of the body, notwithstanding the common belief that it keeps up heat and keeps out cold. Hence alcohol is exceedingly dangerous to those long exposed to severe cold, and blankets or artificial heat are necessary to the health of none more than to that of drunkards, when asleep or at rest. How does alcohol decrease animal heat? Doubtless by means of two of its chemical characteristics. In the first place, alcohol is so greedy of water that it robs all the tissues of some of the water indispensable to the healthy discharge of their duty,—thus causing the thirst which torments the abusers of alcoholics; and, in the second place, alcohol coagulates the tissues. By such means the red blood corpuscles are so altered that their heat-making and life-giving function of carrying oxygen to the tissues is impaired. The inevitable results are not only the generation of less heat and less vital force, but also the removal of less of that effete waste of the tissues, which, when retained, poisons the body. Alcohol certainly diminishes (says Alf. Carpenter and others) the excretion of urea, of carbonic acid, and of bile.

But if alcohol reduces heat, why does it cause the *sensation* of warmth, and why does it increase slightly the heat at the surface of the body for perhaps a half hour or less? Sensations of heat and of cold are due, the one to an increase, and the other to a decrease, of the flow of blood in the skin, and as alcohol increases this flow, the sensation of warmth results. Further, the greater quantity of heat-giving blood in the skin raises its temperature; but the blood at the surface parts quickest with its heat, and more blood in one part means less blood elsewhere, so that, while the heat is increased at the surface for a short time, the heat of the blood *en masse* is decreased from the beginning.

The inquiry now arises, How does alcohol increase the flow of blood to the skin, and probably to the brain? The quantity of blood in a part varies with the calibre of its blood tubes, and variations of calibre depend upon the action of the nerves (vaso-motors) of these tubes. Whether these nerves be paralyzed or inhibited, the tubes relax and thereby enlarge their calibre, thus securing an increased flow of blood through them. The heart, relieved by these relaxed tubes from the resistance previously given by their contraction, beats quicker and at times even

stronger, just as the main-spring of a watch quickens its action when the ordinary resistance to it is removed. Hence, it now seems to the physiologist that even the increased action of the heart is brought about indirectly by a paralysis or a numbing of nerve force. It is certain that alcohol forces the heart to do an immense amount of useless and exhausting extra work: and I doubt not that this is due either indirectly to nerve paralysis, or directly to a poisonous irritation of the nerves of the heart.

The cheerful exhilaration and the wild excitement caused by alcohol seem to indicate an exaltation of nerve force. None the less, analysis of all the phenomena tends rather to prove that nerve force is really diminished. Reason and moral sense, the sole functions in which man surpasses the brute, are the highest manifestations of nerve force, and its lowest manifestations are found in the functions of circulation and respiration, by which there is maintained in man the same lowly life which a vegetable enjoys. Now it is manifest that alcohol begins at the top and numbs nerve force, step by step, downwards to its lowest function. Reason is quickly so weakened that the power to follow out the successive steps of a difficult argument is strikingly impaired. Soon, too, reason lessens or loses its control over the emotions and the imagination: and the result of this loss of control is, that the emotions and imagination riot in their escape from restraint, as shown by laughter, tears, rage, and wild fancies, and by words and acts which prove a lowered moral sense. That reason is weakened is also proved by the fact, that the true relationship of the victim to surrounding objects is so ill appreciated that he becomes foolhardy and ridiculous. While the higher brain functions are being gradually and chaotically disordered, a lower function begins to show that it, too, is becoming impaired, namely, the function of coördination, that function by which we adjust numerous muscles to act in such concert that we stand erect without losing our balance, and walk without staggering, reeling, and falling, as the drunkard does because of his impaired coördination. Finally, every power of the brain is lost, except the one on which depends the continued action of the heart and lungs, and even this power may at last be paralyzed, whereon death ensues. All admit that tremulous or convulsive movements and emotional excitement indicate depressed and not exalted nerve force, and, for the reasons now stated, physiologists teach that alcoholic abuse tends, from first to last, to weaken and paralyze nerve force and not to exalt and strengthen it. The sensations of strength and warmth, like many other sensations known to physiologists, are in this instance delusions, and these sensations, together with the emotional excitement caused by alcohol, are in any case no more than wasted force.

PHYSIOLOGICAL PATHOLOGY OF ALCOHOLISM.

The phenomena of acute and of chronic alcoholism, the one due to occasional and the other to habitual intemperance, now deserve attention. Acute alcoholism is divisible into the three obvious stages, of exhilaration,

of excitement, and of insensibility; but it will serve my purpose better to subdivide it into the *four* stages too often seen in those who are first exhilarated, then jolly drunk, then beastly drunk, and at last dead drunk.

First Stage. Two ounces or less of alcohol, taken by those who have not, through habit, established a vicious tolerance for it, cause exhilaration. The heart, forced by alcohol to throb vigorously, floods the skin and brain with blood. A vigorous circulation, however induced, causes sensations of warmth, strength, and pleasure so generally that it is common to say that "the heart beats high with hope," and that "the pulse throbs with joy." Thus alcohol imparts to the drinker a *sense* of comfort, cheerfulness, and renewed animation; the emotions and imagination are quickened, and thought flows more swiftly. But reason or judgment—our highest brain function—is weakened, as is illustrated by the facts that control over a train of thought is impaired, and that while literary composition is more rapid, it rarely proves, on sober second thought, satisfactory even to the writer. The heat of the body may be slightly increased for some minutes, but it soon decreases, although the sensation of warmth may deceitfully persist for a longer time. The eyes become brighter, the face is flushed, and the tongue wags with glibber fluency; and it here deserves special notice, that a flushed face and a wagging tongue are danger-signals to warn the wise that they have gone too far and should go no farther.

There is as yet no conclusive evidence that moderate exhilaration, if it be neither exceeded nor repeated too often, inflicts any bodily injury. However, the smallest quantity of alcohol injures the healthy as well as the sick, if, as is often the case, it lessens appetite, or causes dry skin, headache, restless sleep, or disinclination to work. Alcohol injures least when taken, much diluted, with food, with fresh cold air, and with exercise.

Second Stage. When more alcohol is taken than suffices to cause exhilaration, the man becomes jolly drunk; with more, beastly drunk; and with still more, dead drunk. The quantity needed to make a man jolly drunk causes, unfortunately, thrills of intense pleasure in many, and these are specially tempted to abuse alcoholics and to become habitual drunkards. In this stage the temperature is so lowered that exposure to severe cold is very dangerous. The poisoned brain is so weakened that the emotions and imagination, escaping from the control of benumbed reason, become riotous. The man is apt to revel in a childish joyousness, and in loss of self-control and in strength of emotions he resembles a spoiled child; like one, he is not continuously joyous, but at times tearful, and again "fighting mad." Reason has left the fountain of the emotions unclosed, and "gush" of some sort must flow. Men ridicule the sentimental gush of emotional women, but God pity the thousands of decent women forced to endure the drunkard's gush! Coördination soon becomes so affected that ability to "walk a chalk line," to thread a needle, and to do other such acts, is impaired. The nerves of the lower lip and of the tongue become so benumbed that they bungle over their

work, and articulation becomes thick and halting. Finally, if nature has not been too often abused, the crying, fighting, hiccuping, jolly drunkard becomes giddy, faint, and sick, and his outraged stomach violently but luckily rejects the poison, leaving him painfully to realize the next day that, in very truth, he is a most miserable sinner.

Third Stage. This stage, beastly drunkenness, differs from the preceding chiefly in the aggravation of the symptoms. The temperature is lower, the eyes are more bloodshot, and speech has become more inarticulate. Coördination is so impaired that the victim's gait becomes more unsteady, he reels and all things about him seem to reel, he staggers, clings to a lamp-post or the nearest object for support, and at last falls "under the table," or stumbles into the gutter. Reason and will are so completely off duty that the imagination is in wild disorder, and the unrestrained emotions disclose without shame the most brutal impulses. Alcohol does not inspire a man to be, but it will reveal if he be, a bully, a coward, or a blackguard. The man, first lowered to a child, has become a brute, often without the decency of even a trained dog. The nerves of touch, taste, smell, hearing, and vision become so perverted that they carry false impressions to a brain now incapable of appreciating correct impressions, and thus arise odd and ludicrous fancies, which force laughter even against one's will.

There are men to whom a drop of alcohol is as a drop of blood to a tiger, and these, as well as some others, are apt to become, instead of beastly drunk, crazy drunk, suffering with veritable *mania à potu*. In this condition they are terrible members of society, often committing crime, and always carrying fear and disaster everywhere, especially to the helpless, innocent, and despairing victims under their control. They recover with remorse, repent, take the most solemn vows, and break them,—relapsing again and again.

Fourth Stage. This stage, dead drunkenness, is characterized by a profound sleep of insensibility, unconsciousness, and relaxation of the muscles, due to a poisonous and almost complete paralysis. Heart and lungs alone continue on duty, and the god-like man, reduced first to a child and then to a brute, has now become a mere vegetable, and an exceedingly offensive one. If heart and lungs fail, which, strange to say, they rarely do, death removes the drunkard from a world where he reaps more pain than pleasure, and where he does to others more harm than good.

CHRONIC ALCOHOLISM.

Occasional indulgence tempts to habitual indulgence, and this often leads to occasional or daily abuse. Every abuse tends to benumb nerve force, so that more and more alcohol is required to produce the cheerful exhilaration which moderate indulgence originally induced. Hence any indulgence in alcoholics is perilous.

Many habitual drinkers exceed strict moderation, who, however, never get drunk, and therefore are now considered moderate drinkers. None

the less such so-called moderate drinkers are more apt to be injured ultimately than are those who, habitually abstaining, do indulge in an occasional "spree." Of course the evil results of habitual abuse vary, much depending on the extent of the abuse and on other circumstances. However, there are some symptoms common to all cases, and deserving attention for the special reason that they are often misinterpreted by the victim. He feels that he is ailing, perhaps breaking down, but so deludes himself as to the cause that he will even resort for relief to larger doses, to soda and brandy, to mixing his liquors, to less fruity wines, or to some other such expedient, which merely "piles on the agony." The extent to which a man, otherwise sensible, can delude himself as to the effects of alcoholic abuse is astounding.

A headache is one of the most frequent results of abuse, and yet a sensible man will urge another to partake of some favorite tipple, with the assurance that there is not one headache in a jug-full. Should headache follow, this is confidently attributed to some such nonsense as to the sugar or lemon in the drink, or to the drunkard's favorite scapegoat, the much maligned liver. True, this organ is the first to receive from the stomach its alcoholic contents, and it rebels against them; but he who will refrain from alcoholics, will soon cease to find cause to complain of either liver, or sugar, or lemons. Many thousands of men pass their lives in an abnormal, unhealthy condition, without recognizing that this is due to habitual alcoholic abuse; and among the symptoms from which few altogether escape, and which are frequently misinterpreted, are the following:

A dry mouth, coated tongue, thirst, diminished appetite especially for breakfast, a longing for alcoholics rather than for food, acidity, heart-burn, eructations, constipation, nausea, vomiting, and a dropsical abdomen denote that the digestive organs are rebelling against their abuse. The over-worked heart rebels with a feeble circulation, cold extremities, palpitations, and a "sense of sinking." The abused skin rebels with dryness or clamminess, with flushings at one time and pallor at another, with "bloat," with a "blotched red nose," with "grog-blossoms," and other eruptions. The abused muscles rebel with tremblings especially of the extremities, with sudden jerks above all at night, with indisposition to exertion, and with easily caused fatigue. The abused nervous system, most sensitive to alcohol, cries out its warnings with sleeplessness or restless sleep, with headache, giddiness, buzzings in the ear, queer numbness and prickings especially in the palms and soles, and with neuralgias. And the brain adds to these warnings languor, low spirits, irritability, vacillating irresolution, distrustfulness, slothful indolence, reckless thriftlessness, profligacy, and untruthfulness. Self-control and self-respect are gradually lost, ambition, honor, and conscience are less and less regarded, and the victim becomes as reckless of oaths as he is of the tears and misery of those who love him.

Of all the evil results of habitual abuse, not one is so disastrous and hopeless as the gradual development of a constant craving for some stim-

ulant. When the laws of health have long been persistently abused with stimulants, there results an abnormal condition of lowered vitality, in which healthy instincts are gradually perverted into misleading appetites. The abused body at last gets into such a morbid condition that there is depression without alcoholics, but cheerfulness with them. The victim longs for them, and feels better with them; he mistakes this feeling for a proof that the longing is a healthy instinct; and he is thus deluded into the fatal belief that alcoholics are not only good for him, but absolutely necessary. He must have his drink at night to put him to sleep, and early in the morning to arouse him to effort. I have never seen a young man in this condition who did not become a confirmed drunkard. He slowly commits a suicide which would torture himself and others less if done more promptly.

A constant craving for drink becomes the more disastrous as soon as it is associated, as sooner or later it always is, with little or no appetite for food. The pure blood, which gives health and life, requires bread and meat to make it; it cannot be made out of alcohol, substituted for these, and whenever this frequent experiment is tried, the brain shrivels out, with "the horrors" of delirium tremens, that it refuses to do its work with such poisoned blood. There is no cure except cleansing the blood of its perilous stuff.

The self-indulgence which habitually abuses alcoholics, and thus originates a constant craving for them, is certainly a vice, for there is a time in every one's life during which he has enough will to abstain; but this vice so weakens the brain that at last the strength of will, necessary to resist the craving, is destroyed, and the disease, dipsomania, is established.

Having considered some of the evidences of alcoholic abuse given by the living, the evidence given by the dead will now be briefly considered.

PATHOLOGICAL ANATOMY.

The most frequent and important lesions found in the bodies of dead drunkards are of the same nature as those produced by old age. Fibroid, fatty, and chalky degenerations gradually invade the tissues and unfit them to maintain health and life. By these degenerations vital force is prematurely lowered and exhausted, and the constitution is so impaired that there is far less power to resist disease. So that it is notorious that the abusers of alcoholics greatly increase their liability to death by accidental injuries, and by epidemic and other diseases; and that, if these fail to shorten their lives, decrepitude, old age, and death come on before their time.

Diseases of the liver and other organs of digestion cause four times more deaths among the intemperate than among the temperate; diseases of the kidneys, twice as many; pneumonia and pleurisy, diseases of the heart and blood vessels, and diseases of the nervous system all cause a marked increase in the number of deaths. The intemperate die in much

larger number than the temperate by atrophy, debility, diabetes, dropsy, calculi, congestion of the brain, apoplexy, and paralysis. And under such names the doctor conceals, for the sake of family and friends, thousands of deaths due really to alcoholic abuse. But the worst remains to be told, for surely no injuries are so shocking as those which parents transmit by vicious self-indulgence to helpless unborn children. It is a law of nature, as to living things, that they shall bring forth seed after their kind. In confirmation of this law, Aristotle taught that "drunken women have children like unto themselves;" Plutarch taught that "one drunkard begets another;" and Dr. Oliver Wendell Holmes, expressing the conviction of modern science, has wittily declared that "we are omnibuses in which all our ancestors ride."

One of the highest authorities in hygiene teaches that a "craving for drink may itself be inherited, or the thieving and cunning propensities, developed in the parent to obtain stimulants at all hazards, may become so intensified in the offspring as to render him a born thief and vagabond."

It is now beyond question that a disproportionately large number of drunkards' children become useless members of society; who are afflicted with a weak will, with mental debility, defective moral sense and depraved appetites; who are dwarfed or stunted in body and mind; and who suffer with impotence, hysteria, epilepsy, dipsomania, insanity, and idiocy. So great are the hereditary evils of alcoholic abuse that this generation would have been much inferior to what it is but for the three following influences, which have notably tended to enforce the law of "the survival of the fittest:" Mothers are more apt to transmit than fathers, and, luckily for mankind, our mothers generally have been for many centuries comparatively temperate:¹ further, alcoholic abuse greatly shortens life; and still further, it markedly lessens reproduction. The result is that the sins of the fathers can seldom be visited upon the children for more than the third and fourth generations, because, fortunately, no children are then left to breed another vicious crop.

VITAL STATISTICS.

Hygiene teaches how to preserve health, how to prevent disease. But in order to do this, the extent of sanitary evils and their causes must be known, and this knowledge is supplied, wholly or in part, by that hand-maid of hygiene called Vital Statistics. Therefore attention is now solicited to some statistics concerning alcoholism. However, before presenting these, it is well to warn the reader that none of them have been derived from partisan advocates of the temperance cause, but all from the most recent medical authorities, who are special advocates solely of the cause of science.

Some benevolent unions are composed of members who are total abstainers, and many more are composed of non-abstaining members. Comparison between the two has shown that the sickness, the deaths, and

¹ The U. S. census of 1880 shows, says its former superintendent, the Hon. Francis Walker, five male deaths to one female death by alcoholics.

the expenses for both are, in all three items, more than twice as great among the non-abstainers as among the abstainers.

In one hospital where alcoholics had cost 83 cents per head, the quantity was so diminished in 1875 that the cost was only 23 cents per head, and therewith the death rate decreased by 35 per cent.; thus proving the well known fact, that even doctors have been in the habit of prescribing alcoholics too freely for the good of their patients; which is not surprising, since it is notorious that many doctors take too much for their own good.

It has been found that about one half the patients in inebriate asylums have had drunken parents, and that hereditary drunkenness is most apt to manifest itself from fifteen to twenty-five years of age. It has been found in different insane asylums that alcoholic abuse is mixed up with the cause of insanity in from one eighth to one half of all the patients afflicted with this dreadful disease. So that two of the highest living authorities, Bucknill and Maudsley, declare that "intemperance in drink is by far the most potent of all removable causes of mental disease."

In 1883 the able doctors of the famous *Harveian Society*, of London, made the most thorough investigation ever yet made of the influence of alcoholics in causing death. They found that one seventh of all the deaths of persons over twenty years of age were due wholly or partially to alcoholics, and there is good reason to believe that the proportion is not less in the United States. However, life insurance companies, devoted exclusively to making money, have furnished the most convincing proofs of the influence of alcoholics in shortening life and causing death. Neilson's *Vital Statistics* furnish the following horribly instructive table:

	An intemperate person's chance of living.	A temperate person's chance of living.
At 20 years of age,	15.6 years.	44.2 years.
At 30 years of age,	13.8 "	36.5 "
At 40 years of age,	11.6 "	28.8 "
At 50 years of age,	10.8 "	21.25 "
At 60 years of age,	8.9 "	14.285 "

This table conclusively proves that the jolly boys who seek through alcoholics "a short life and a merry one," realize with certainty the first half of their aim; and no table is needed to prove that the intemperate insure themselves a less happy and useful life, and that when drunkenness and prosperity once shake hands they usually bid each other good-bye forever. To the ordinary causes of sickness and death there must be added the numerous accidental injuries to which drunkards are especially

liable. But accidents, sickness, and death greatly fail to represent all the suffering due to alcoholics, as will now be shown.

One half of the paupers of England are intemperate themselves, or are the children and wives of the intemperate. From one half to three fourths of all persons arrested and of all convicted of crime have their offences mixed up with intemperance. Wilson's Hygiene teaches that four fifths of the prison population are, directly or indirectly, the victims of intemperance; and a high authority asserts that one ninth of all cases of suicide are due to alcoholics. It has been proved in England that the number of the insane, of paupers and of criminals, varies chiefly with the annual expenditure for alcoholics.

Further, even these statistics of sickness, death, pauperism, and crime fail to portray the whole dreadful truth. The 35,000,000 population of Great Britain expend annually on their alcoholic luxury \$700,000,000, and employ 180,000 persons to traffic therein. Yet this waste of money is only a fraction of the enormous tax for alcoholics paid by the public;—it fails to represent the expenditure which alcohol imposes for such consequences as sickness, death, pauperism, and crime; for hospitals, poor-houses, and asylums, with their nurses, doctors, and druggists; and for jails, penitentiaries, and court-houses, with their policemen, juries, lawyers, and judges. Carefully itemizing all the losses of the United States from alcoholics, Dr. Hitchcock, president of the Michigan State Board of Health, estimated in 1876 that our annual loss "must equal or exceed \$2,000,000,000." This is equivalent to a tax of more than \$150 per annum on every male over twenty-one years of age residing in the United States.¹

Further still, after exhausting statistics, large additions must still be made to the list of evils caused by alcoholics. For who can estimate the number or amount of such results as are suggested by the mere words, blighted lives, ruined prospects, business failures, domestic troubles, divorces, brothels, and gambling-hells? All know that alcoholics often have a mighty hand in all these evils.

The facts which have now been submitted are so appalling that they justify, in every lover of his fellow-men, feelings of fear, sorrow, and despondency. Are there not to be found some rays of hope to lighten up the dark and dreary picture which has been held up for your inspection? There are such rays,—enough to brighten the path of human progress, to justify the belief that man has in his nature more good than evil, to strengthen the conviction that good will ultimately triumph over evil, and to intensify the faith that a merciful God rules the world. Your attention will now be called to some of the compensations and consolations for the abuse of alcoholics, and to the means by which its many evil results are to be corrected.

¹On the other hand, a report of the U. S. Brewers' Association asserts that in 1880 the U. S. treasury received for alcoholics \$68,205,166, and that this sum exceeded by \$1,100,000 all the expenses incurred in the support of the whole insane, pauper, and criminal population of the United States.

COMPENSATIONS AND CONSOLATIONS FOR ALCOHOLIC ABUSE.

As one compensation for the evils of alcoholic abuse, political economy plausibly suggests that the surplus of our grain crops is now consumed in the manufacture of alcoholics; and that in case of a short crop, while there would be no surplus for alcoholics, there would still remain an ample supply of grain to protect the people from famine—an evil which repeatedly afflicted our ancestors more than the alcoholic evil afflicts us.

A second compensation is, that the treasury of the United States derived, during the five years, 1881-1885, from "spirits" and "fermented liquors," an average annual revenue of \$87,776,553.

I have greater faith in a third compensation, derived from another source. What this compensation is, will be indicated by criticism of the following quotation. A temperance enthusiast has declared, that "The demon Alcohol is yearly dragging down to dishonorable graves hundreds of thousands of the brightest and fairest of our land." The gross exaggeration of such a statement strikingly illustrates the proverb, "The devil is not as black as he is painted." It is stated that alcohol kills "hundreds of thousands" annually. Now, the truth is that there are annually, by all causes, less than ten hundred thousand deaths of all the men, women, and children in the United States; that probably from fifty to ninety thousand deaths are due wholly or partially to alcohol; but that there is no satisfactory evidence that the number ever amounts to even one hundred thousand. None the less, this exaggeration is less gross than the statement that these "hundreds of thousands" are "the brightest and fairest of our land." Are we to forget that the sun rises on the evil as well as on the good, and that the rain is sent on the unjust as well as on the just? Although I well know that some men having the highest principles, the ablest heads, and the tenderest hearts, become victims of alcohol, I am fully as well convinced that a majority of its victims are essentially weak and worthless specimens of humanity; and therefore I maintain that while alcohol does kill some of "the brightest and fairest," it yet kills a much greater number of those who are the very reverse. Drunkards, as a class, are characterized by lack of the forethought which signalizes a sound brain, by feebleness of will, and by strength, where brute are strongest, in emotions and impulses. They are civilization's failures, and in the march of progress would become stragglers, burdensome to the advancing army, even if there were no alcohol. There are thousands of intemperate insane, paupers, and criminals, who if not intemperate would still be insane, be paupers, and be criminals. And, as to the last, sober criminals injure society far more than drunken ones. For these reasons, I believe that alcohol, spite of all its monstrous evils, does some good to posterity, by hastening "the extinction of the unfit" and fostering "the survival of the fittest." This belief gains additional strength from my conviction that the proportion of good men to bad has increased

and is increasing throughout Christendom, notwithstanding its abuse of alcoholics for many centuries.

I find a fourth compensation in the fact that Christian nations rule the world in spite of the truth that they have always been, and still are, comparatively intemperate nations, and that the more northern and intemperate of these Christian nations excel the more southern and temperate. The intemperate Germans are superior to the abstemious Turks, and the intemperate Scotchmen and Americans are superior to the temperate Spaniards and Mexicans.

Attention is now called to some other facts calculated greatly to console pessimistic philanthropists. Temperance enthusiasts misrepresent these facts so often that I have given them special study, and shall present them at considerable length. They bear on the question whether intemperance has increased and is increasing in modern times. The great importance of this question depends on the fact that its correct decision involves right views as to the causes, and, therefore, as to the best remedies, for intemperance.

Although it is manifest to the student of history that civilized men have progressed, not only in science and the arts, but also in morals, yet there are various reasons why the ill-instructed majority should be predisposed to believe that intemperance and other immoralities have grown worse:—in fine, that present times are bad, and that the “good old times” have passed away.

Childhood is proverbially the period of freedom from care, of hope, and of cheerfulness, while maturity and old age are the periods of care, of hope deferred, and of weariness of life. Therefore it is natural to communities, as it is to individuals when advanced in years, to claim that during their earlier days the times were better.

Another reason for the common tendency to believe that evils are increasing, is found in the fact that there have always existed evils, which, concealed from or unobserved by youth, are disclosed to the experience of advancing life so gradually that increase in a knowledge of evils is readily mistaken for an increase in their growth. Respecting intemperance, every year modern science furnishes new and stronger evidence of both the enormity and the extent of alcoholic abuse: and every year the progress of education increases the number of those who are impressed by this evidence. It is natural, then, that the outcry against intemperance should increase, whether the evil be increasing or not.

A third reason for the popular delusion as to the “good old times” deserves notice. Early in life, when the strongest prejudices are imprinted, all were encouraged to believe that a “golden age” had gilded some remote past; that a terrestrial Paradise had been conferred by the Almighty on a pair of human beings “created in his own image,” and made “very good;” and that from this perfect pair descended the murderous Cain and an innumerable multitude of degenerate children. Taught to believe that we are members of a retrograding race, it is no wonder that men should readily credit any evidence tending to prove that

the race is growing worse. But the evolutionist, denying man's origin from a perfect pair, and assigning this origin to a much more lowly source, enjoys a firm and cheerful faith in man's progress, and, therefore, demands indisputable proof of any claims made in behalf of the "good old times," and indisputable proofs of any accusations that the mass of mankind has retrograded. This healthy skepticism of evolution has prompted in recent years many notable and instructive researches. To one of these your special attention will be called.

The Rev. Dr. Valpy French published in 1881 an octavo of 308 pages, entitled "Nineteen Centuries of Drink in England," which furnishes most valuable evidence on the question whether the frequent and positive assertions that intemperance is increasing are justified by history. From this source chiefly, but also from other sources, I have gathered some historical notes, which require a brief preface before presentation. These notes are, of course, less and less numerous and satisfactory the farther back they go into past centuries, when literature and history were less and less cultivated. While the many dates attached to these notes indicate often the date of record, and always the special time referred to, yet it ought to be obvious to the reader that in this matter, whatever may have been true as to any particular year was probably equally true as to many other years, both preceding and succeeding the particular year referred to. From my brief notes many instructive references are plainly to be drawn, which a desire for brevity induces me to leave to the reader. Finally, it should be remembered that although my notes are comparatively few, they serve as good examples of numerous others to the same effect: and that although they refer more especially to England, yet that they fairly illustrate the United States, whose people were English until 1776, and of whom a vast majority continue to be of Anglo-Saxon descent.

My notes are as follows:—

The abuse of alcoholics, and even their desecration to religious debauchery, prior to the Christian era, has been already referred to, and is familiar to every student of history. The Bible records one instance from which I derive some consolation, and shall note before entering upon the record of intemperance since the birth of Christ. Benhadad, king of Syria, in company with thirty-two other kings, all got drunk together. Now, not even newspaper reporters will allege that modern kings so badly misbehave themselves.

First Century. Pliny the Elder (who died A. D. 79) wrote,—"The whole world is addicted to drunkenness. The perverted ingenuity of man has given even to water the power of intoxicating, where wine is not procurable. Western nations intoxicate themselves by means of moistened grain." Tacitus testifies that in the first century the Germans were greatly addicted to drinking beer to excess. In order "to check the growth of intemperance," the Roman Emperor Domitian issued, A. D. 81, an edict which prohibited vineyards in England. This edict was revoked A. D. 276. From A. D. 45 to 110 the Romans ruled

Britain. They introduced drinking bouts and the custom of drinking healths; and they sowed the seed of Roman debauchery, which yielded a rank crop of excesses, not only in drinking, but also in other vices.

Third Century. Intemperance was no stranger to any rank of society. A. D. 281 a Roman emperor, defeated in battle, committed suicide by hanging, and the people said of him, "There hangs a tankard and not a man."

Fifth Century. In A. D. 449 Britain became England by the conquest of the Angles and the Saxons, and drunkenness was a prominent link in the chain by which this conquest was effected. The Saxons carried the German custom of drinking beer to excess to vanquished England, and history declares that the English inherit from their Saxon forefathers "a perfect legacy of corruption." History further records that subsequently, in the middle ages, "strong wine or ale was drunk early in the morning and often far into the night; in short, gluttony and intemperance were prominent characteristics of the sturdy, fighting Britons of mediæval times." As is well known, the Anglo-Saxon successors of these Britons have been the greatest of all colonizers, and have circled the earth not only with the sound of their drums, but also with their ales and worse liquors.

Sixth Century. Christianity was introduced into England during this century. About 575, Gildas, a distinguished British ecclesiastic, declared that "not only the laity, but also our Lord's own flock and its shepherds, who ought to have been an example to the people, slumbered away their time in drunkenness, as if they had been dipped in wine." The British Church issued decrees respecting intemperance, so great was the evil. The action of the authorities of the church, in respect to intemperance, has special significance, not only because of the indications of gross and frequent intemperance among the highest teachers of morality, but also because of the great power wielded for many centuries by ecclesiastical laws and courts.

Seventh Century. The dedication of churches to God was attended, about 660, by "disgraceful scenes of riotous festivity." About 660 an archbishop harshly censured his bishops because given over to "drunkenness and other snares of a sensual life." During this century there is on record an almost continuous series of ecclesiastical canons, decrees, and anathemas bearing upon the national intemperance.

Eighth Century. In 747, ecclesiastics and monasteries were admonished for "drunkenness," and nunneries were warned that they must cease to be secret *rendezvous* for drunkenness and other sensual vices. Saint Boniface, a native of England, wrote that drunkenness was "an evil peculiar to pagans and to our race."

Tenth Century. About 970, King Edgar, being prompted thereto by Archbishop or Saint Dunstan, harangued his clergy thus: "They spend their days in diversions, entertainments, drunkenness, and debauchery. Their houses may be said to be so many sinks of lewdness. There they pass their nights in rioting and drunkenness." At the close

of this century, the first toast at royal festivals was to the king; the second to Christ; the third to the archangel Michael; then to St. John the Baptist, etc.

Eleventh Century. In 1008 priests were publicly warned not to visit ale-houses nor to get drunk. Niebuhr says that "England at the time of the Conquest [Norman, in 1066] was not only elate with the drunkenness of crime, but also with the crime of drunkenness."

Twelfth Century. John of Salisbury wrote, "Habits of drinking have made the English famous among all foreign nations." There is abundant evidence that the clergy continued to be drunkards.

Thirteenth Century. The archbishop warned clergymen against "the ill practice by which all that drink together are obliged to equal draughts, and he carries away the credit who hath made most drunk and taken off the largest cups; therefore we forbid all forcing to drink." In 1275 popular drinks were called "bishop," "cardinal," "pope," instead of "punch," "smash," and "cocktail," as now.

Fourteenth Century. In 1308 a bishop's induction to his see was often a disgrace to civilization because of the drunkenness and rioting. In 1303, as also in 1308, the heads of the church had to forbid drinking *inside* of the churches. In 1309 Froissart says that at a king's pageant in London, seven street fountains were made to flow continuously with wine to supply the people; and that the common allowance of alcoholics for a gentleman with his lady, at breakfast, was one quart of beer and one quart of wine.

Fifteenth Century. In 1461 the amount of strong drinks taken at public entertainments was prodigious. In 1483, funerals as well as weddings were scenes of drunkenness.

It now deserves note that it was in this century that William Caxton introduced the art of printing into England, printing, in 1473, the first English book ever published. The wonderful progress of this art is well known, and accounts for the fact that historical records have become more and more abundant from that time to the present day.

Sixteenth Century. In 1504 the clergy, high and low, were given to drunkenness. In 1536 it is stated that great irregularities and licentiousness had crept into religious festivals, especially in the churches, chapels, and graveyards. "Public houses were crowded in London from morning to night with inveterate drunkards." In this place it deserves note that in 1534 England, under Henry VIII, denied the pope and the Roman Catholic Church. Until 1551 England had had no civil legislation whatever against drunkenness; but in this year it was made a crime. How universal and respectable was the custom of drinking to excess is proved by the fact that the first good drinking song in the English language was written and published by the Rt. Rev. Dr. Still, a bishop of the English Church. The first stanza and chorus of this famous song are as follows:—

"I cannot eate but lytle meate,
My stomacke is not good,

But sure I thinke that I can drinke
 With him that wears a hood.
 Though I go bare, take ye no care,
 I nothing am a colde,
 I stuff my skyn so full within
 Of jolly good ale and olde.

Chorus: "Backe and syde go bare, go bare,
 Booth foote and hand go colde,
 But belly, God send thee good ale yngouge,
 Whether it be new or olde."

Considering the evidence given in all the four stanzas, the modern hygienist is not surprised that the pious bishop's stomach was "not good." About 1576 Bacon wrote that "all the crimes on the earth do not destroy so many of the human race, nor alienate so much property, as drunkenness." Acts of parliament in 1597 and in 1602 testify to an increase of drunkenness.

Seventeenth Century. Early in this century, in Shakespeare's time, public houses served ale to each customer in vessels which often held as much as eight pints. Some physicians prescribed drunkenness as a remedy for disease. In 1609, kings got drunk, and ladies of rank "rolled intoxicated in open court at the king's feet." Legislative restriction and ecclesiastical monition were rife against drunkenness. From 1603 to 1607, laws had been enacted to restrict the number of drinking-places by licensing inns and ale-houses, and to punish drunkenness by fine and confinement in the stocks; but a statute of 1609 declares that "notwithstanding all former laws and provisions already made, the inordinate and extreme vice of excessive drinking and drunkenness doth more and more abound," and like evidence is given by a statute of 1623. Under the laws made to discourage drunkenness, justices were openly charged with being more industrious in patronizing, than diligent in suppressing, drunkenness and drinking-houses. It is recorded that the misgoverned homes of gentlemen, ministers, magistrates, and great men were often made "the very theatres of Bacchus." Bishop Hall declared that drinking was "the most popular vice;" and in 1621, Burton, the author of the *Anatomy of Melancholy*, exclaimed.—"What immoderate drinking in every place!" "T is now," said he, "come to that pass that he is no gentleman, a very milksop, that will not drink." The poet Milton also testified, about the middle of this century, that there was "no more foul common sin among us than drunkenness." In 1627, wakes were prohibited because of the drunkenness attending them, and in 1632 it is declared that there was a profusion of drinking-houses in London, and that, in some localities, whole streets were lined continuously with such houses. In 1643 the **duty on alcoholics known as the "excise" was first established.**

In Cromwell's time, 1650-1658, England had earned for herself the distinction of being "the land of drunkards." Ladies of the highest quality visited taverns to drink, and at table women vied with the men in drinking. Drinking was the afternoon's diversion of the gentry, and

it was deemed "a piece of wit to make a man drunk." Cromwell strove in vain to repress intemperance by fines and punishments. An author of that day wrote as to London, "For confident I am that fifteen of twenty, this city over, are drunkards."

During the reign of Charles II, 1660-1685, history records that "drunkenness prevailed in every rank of society, and the king set the example." It is said, in 1672, that "no kind of business is transacted in England without the intervention of pots of beer," and in 1682, that the vice of drunkenness even "beset women of rank."

During the reign of William and Mary, 1689-1702, "from highest to lowest, intemperance raged;" there were "thousands of beggars, both men and women, perpetually drunk." In 1689 the importation of all foreign spirits was prohibited, but the home distilleries flourished all the more. In 1693 a common but a heavy charge on the church parishes was for "communion wine" and "wine for the vestry." A bishop of the English Church did not hesitate publicly to admonish his people that "it was wrong to get drunk on the day of the funeral of a bishop," but when a king or ruler died it was "not a sin to get drunk." In 1695, at Warwick castle, a cistern containing 120 gallons of punch was emptied to the health of His Majesty William III.

Eighteenth Century. The British parliament attempted at the beginning of this century to check the excessive use of ardent spirits by imposing an enormous duty, but, through smuggling, "the act became a dead letter, and was repealed in 1742." In 1713 there was "unbridled excess in drinking." The Bishop of Cork delivered a discourse to his clergy against drinking in memory of the dead. In 1716 "the abuse of the practice of toasting had become a national disgrace." In 1720, weddings and funerals were incomplete without wine, and many women at such times drank freely.¹ In 1724 gin-drinking raged as an epidemic; and "retailers of gin hung out painted boards announcing that their customers could be made drunk for a penny, dead drunk for two pence, and have straw for nothing," and cellars were provided with straw for those who became drunk to sleep on until they became sober.

In 1725 drinking among women was common. In some cases, every seventh house in London sold intoxicants, and Benjamin Franklin found printers drinking habitually five pints of porter daily. In 1732 a prohibitory duty was placed on the retail of spirits, but, nevertheless, intemperance spread like a plague, and in 1733 a much more stringent prohibitory law, the famous "Gin Act," was enacted, but "it was ineffectual even to check the progress of intemperance," and, though powerless for good, was charged with increasing the evil.

In the House of Lords, in 1743, Lord Hervey denounced the "universal thirst" for alcoholics. Lord Lonsdale said that whoever passed along the streets saw drunkards "stretched along the pavement," and others

¹ A learned and pious friend asserts that history proves that the custom of holding the marriage ceremony in England in the earlier part of the day was due to the frequent inability to procure, at later hours, a sober clergyman to perform the ceremony.

not there, but much more dangerous. "No man can pass," said he, "a single hour in public places without meeting such objects, or hearing such expressions, as disgrace human nature." "Not only are our streets filled with madmen and our prisons with criminals, but also our hospitals with cripples." He also referred to "women who riot in this poisonous debauchery." About this time the so-called "Tippling Act" was passed, which prohibited the retail of spirits. The results were that appetite was diverted into the channel of beer; that within two years, 12,000 persons were punished for violation of the act; that spirits were clandestinely sold; that the law could not be executed; and that it was forcibly proved that "a government cannot be far in advance of the people whom it governs. Extreme repression has been and ever will be evaded."

In 1748 there was much denunciation of intemperance among women. In 1773 Dr. Samuel Johnson said,—"I remember when *all* the decent people in Lichfield got drunk *every* night, and were not the worse thought of," and that there was then, in 1773, less drinking than with our ancestors. In 1787 the historian of the Life of George IV wrote that "men of all ages drink abominably." Taverns were crowded with morning drinkers, colleges were beset with drunkenness, and drunkards of repute scandalized public worship *inside* the churches. It was from 1733 to 1762 that Hogarth gained his fame by depicting the vices of his time in such famous and life-like sketches as "The Harlot's Progress," "Gin Lane," etc. Throughout the eighteenth century habitual drunkenness was prevalent, not only among the highest in the land, but also among collegians, tradesmen, and every grade of society. An historian truthfully says that "drunkenness, dissoluteness, and the sword, hanging on every fool's thigh to do his bidding, were the characteristics of the period. People got drunk at dinners, and then slew one another, or in some other way broke the law." Thackeray's "Henry Esmond," which Anthony Trollope lauded as the best novel in the English language, portrays these characteristics of the eighteenth century vividly, and no doubt faithfully.

Nineteenth Century. In 1805 William Playfair wrote,—"Drinking and gluttony are the vices to which the common people in this country are most addicted." In 1814 "drinking was the fashion of the day." "Drinking and play were more universally indulged in than at the present time." At dinners, each guest was given two bottles of port, and there were men well known as three, four, five, and even six bottle men. In 1821 "the stronger spirituous liquors were all the rage." Referring to Christmas in London, it is said that "in every broad thoroughfare and in every close alley there was drunkenness abroad; not shame-faced drunkenness, creeping in maudlin helplessness to its home by the side of the scolding wife, but rampant, insolent, outrageous drunkenness. No decent women, even in broad daylight, could, at the holiday seasons, dare to walk alone in the Strand or Pall Mall." In 1830, women frequented drinking-places in London, and at a police

station there were found "mostly women who had been picked up in the streets where they had fallen drunk." Officers of courts of law alluded to the increase of the consumption of gin "as a dreadful and horrible evil." Sir George Hampson said that "gin-shops were now decorated and fitted up with small private doors, through which women of the middle, and even above the middle, classes of society were not ashamed to enter and take their dram, when they found they could do so unobserved."

"Britain's plague-spot of drunkenness" was so great, and the "spirit-drinking so terrible," that parliament enacted the famous Beer Act of 1830. This act permitted the sale of beer and cider by retail in England, but imposed a heavy license tax on the vending of wine and spirits. The results teach a notable lesson to those who make the laws, and were as follows: During the ten years preceding the act, 1821-1830, the quantity of malt used for brewing was 268,130,389 bushels, and the quantity of British spirits consumed was 57,970,073 gallons; and during the ten succeeding years, 1831-1840, these figures were notably increased to 344,143,550 bushels of malt, and 76,797,365 gallons of spirits. In further confirmation of these figures, it was found that the Beer Act was followed by a large increase in the number not only of beer shops, but also of shops for the sale of spirits. In 1839 a select committee of the House of Lords reported that "it was already sufficiently notorious that drunkenness is the main cause of crime, disorder, and distress in England, and it appears that the multiplication of houses for the consumption of intoxicating liquors, which, under the Beer Act, has risen from 88,030 to 123,390, has been thus in itself an evil of the first magnitude." In 1854 a committee of the House of Commons reported that "the beer-shop system has proved a failure;" that "the amount of drunkenness is very much greater than appears upon the face of any official returns;" and that the testimony is universal to the greatest amount of drunkenness on Saturday night, and on Sundays during those hours when the drinking-shops are allowed to be open.

In 1800 the "Wine Licenses Act" was passed, which greatly encouraged and immensely increased the amount of light wines drunk. In 1809 the "Habitual Drunkard's Bill" became law. In 1850 the "Local Option Act" was passed, entrusting every community with power to protect itself from traffic in liquor. The results of this act are reported to be excellent, and, as one instance thereof, it is said that there were, in 1884, more than 1,000 parishes in the province of Canterbury where there was neither a public house nor a beer shop, and "where, in consequence of the absence of these inducements to crime and pauperism, the intelligence, morality, and comfort of the people are such as the friends of temperance would have anticipated." An additional proof of the good results of "local option" in England is found in a statistical, not temperance, report that a comparison of the drink bills of 1876 and 1884 shows that the \$735,000,000 spent in 1876 was reduced in 1884 by more than \$23,000,000.

The evidence now presented fully justifies Herbert Spencer in the following statements: "In generations not long passed away, sobriety was the exception rather than the rule: a man who never had been drunk was a rarity. Condiments were used to create thirst: glasses were so shaped that they would not stand, but must be held till emptied; and a man's worth was in part measured by the number of bottles he could take in." This last statement of Spencer's is verified by one of Burn's drinking songs:

"Wha first shall rise to gang awa',
A cuckold, coward loon is he!
Wha last beside his chair shall fa',
He is the king amang us three!"

Spencer further says that "for a long time past among the upper classes the drinking, which was once creditable, has been thought a disgrace; while among the lower classes it has greatly decreased, and come to be generally reprobated."

For my own part I am sure that drunkenness has decreased where all reforms begin, at the top, that is, in so-called good society. Within my own manhood, say since 1850, it has certainly become far less common for gentlemen to make of every sideboard a private bar, and insist for hospitality's sake that every visitor shall "take a social glass;" to accept "treats" and get "tight," whether desired or not; to deem it an insult if a "treat" be declined; to drink each other literally "under the table;" and to boast of the number of bottles required to convert a gentleman into a brute. Drunkards have certainly become less numerous in the homes of good society and are less respected by the public. Such is my testimony to what has occurred during my own manhood, and to this I will add much more conclusive evidence.

The Hon. Joseph Nimmo, Jr., chief, in 1883, of the U. S. Bureau of Statistics, favored me with a table of the annual consumption of alcoholics at each decenniad from 1840 to 1880 inclusive. This table proves that in proportion to population, and comparing 1850 with 1880, the quantity of alcoholics consumed in the United States had very greatly increased. But it also proves that the quantity of alcohol consumed, the sole question of moment, had decreased. This apparent contradiction is easily explained by the facts that the quantity of spirits consumed in 1880 had so much decreased, that the enormous increase in the consumption of malt liquors especially and of wine failed to make the quantity of alcohol consumed in 1880 equal to what it was in 1850.

This conclusion is derived from the following data: The population was 23,191,876 in 1850, and 50,155,783 in 1880; the alcoholics consumed in 1850 were 51,833,473 gallons spirits, 6,315,871 gallons wines, and 36,563,009 gallons malt liquors, which amount to a total of 94,712,353 gallons; and in 1880 63,525,694 gallons spirits, 28,329,541 gallons wines, and 414,220,165 gallons malt liquors, which amount to a total of 506,076,400 gallons. Now, sanitarians usually estimate that

spirits average about 50, wines about 10, and malt liquors¹ about 5 per cent. of alcohol, and this estimate yields the results that in 1850, while there were 4 gallons of alcoholics per head, this contained 156 ounces of alcohol; and that in 1880, while there were 10 gallons of alcoholics per head, this contained only 141 ounces of alcohol,—a decrease of about 10 per cent.

Even if there had been an increased consumption of alcohol, this would not have necessarily proved increased abuse of alcoholics. Their greater cheapness and the greater facilities for their transportation and distribution would naturally cause greater waste, greater use for other purposes than drinking, and their more universal and habitual use for drinking in moderation. Thus, there might be less abuse, yet greater consumption. Beyond doubt, the comfort of the people, their health and longevity, have all greatly improved in recent times, and such improvements are inconsistent with the belief that alcoholic abuse has increased.

In view of all the facts now presented, it seems to me impossible to refuse assent to the conclusions of the Rev. Dr. French, which are that it is "an unquestionable fact that in the higher circles of society, far less is drunk than formerly;" that it is beyond question that "temperance habits have made prodigious strides in the last few years;" that "temperance and total abstinence march from one conquest to another, blessed by bishops, clergy, and even princes of the Christian church, patronized by doctors, eulogized by hard-headed men of business, and gathering in everywhere crowds of enthusiastic converts." In truth, now for the first time in the history of Christian nations, gentlemen regard drunkenness as vulgar, the clergy of all creeds denounce it, our laws stamp it with opprobrium, the enemies of intemperance are organized in armies of hundreds of thousands,² and public education is fostering among children a knowledge of the evils due to alcoholics. I think all must now concede that there are some very gratifying compensations and consolations for the monstrous evils caused by the abuse of alcoholics.

CAUSES AND REMEDIES.

The effectual application of remedies to any evil depends upon due appreciation of its causes; and the worse the evil the more important is it, if we would apply the best remedies, that the causes should be duly appreciated. As has been stated, the abuse of alcoholics originates in the beneficent instinct which prompts man to seek pleasure and to avoid pain. Alcoholics will be used as long as they continue to be the best agents known to man to heighten his joys and to make him forget his woes, if only momentarily; and they will be abused until men have become so convinced, that alcoholics cause, in the end, far more pain than

¹ Dr. L. C. French's report to the New York Board of Health states that in America lager beers are 4 per cent. of alcohol, and that 140,000,000 gallons are consumed annually. An other report gives the alcohol content as 4.25. French's report gives 4.5. American wines.

² The first temperance union organized in the United States was at Boston, in 1826.

pleasure, that this conviction will develop strength of will sufficient to enable men to sacrifice slight present gratification to great future good.

History proves that these causes promotive of temperance have progressed: for surely history proves that the pleasures of life have increased, and its pains have diminished, thus greatly lessening the temptations to drink; that there is a more wide-spread and firmer conviction of the evils due to alcoholics; and that in the struggle for existence men have gained, in larger and larger number, strength of will to sacrifice present gratification to future good. Thus history teaches, first, that temperance has increased, and, second, that the causes thereof have also increased; and the fact that these two lessons are taught independently, and yet that the one confirms the other, is calculated to strengthen one's faith in both lessons, and to confirm the conviction that if we would speed the temperance cause we must foster those conditions by which this cause has already been so signally promoted. We must strive to increase the pleasures and to diminish the pains of life, and to lessen in every way the temptations to drink; and we must labor, above all things, to disseminate a knowledge of the monstrous evils of intemperance. To accomplish these ends there are three remedies.—*Sanitation, Prohibitory Laws, and Public Education*,—which will be briefly considered.

Sanitation. Probably nothing tempts men to drink more frequently than low spirits, and sensations of languor, debility, and exhaustion. These are most often due to lowered health and vitality; for the number of the healthy who do not maintain the maximum of health is very great. Lowered health and vitality are caused chiefly by sanitary evils, such as impure air and water, insufficient and badly cooked food or other errors of diet, overwork and also underwork of body and mind, and by the ignorance, improvidence, poverty, and want which foster these evils. Considering these things, a wise man, though not a physician, has declared that what is chiefly needed to stop the abuse of alcoholics is the sanitary reformer. To furnish one illustration, it has been found that intemperance in England prevails most in the marshy localities infested by malaria; and I have long held that if there be, as I fear, more intemperance in Louisiana¹ than in many other states, this is due chiefly to the greater prevalence of swamp poison.

While many men are tempted to drink by the depressing influence of sanitary evils, a large number are also often tempted to drink by the desire to escape temporarily from the toils of a dull, stupid, and monotonous life, and "to have a little fun." As respects this last temptation, I believe that churches are responsible for the extra large amount of drunkenness which so often disgraces Sunday, by having made this day the idlest and most stupid in the week; and I rejoice that I can here summon

¹ The "Finance Report" (p. 100) of the U. S. Secretary of the Treasury for 1880 shows that the proportion of liquor dealers to the total population was 1:13.9; that the variations from this general average were 1:64 in Nevada and 1:857 in Maine; that the proportion in Louisiana was 1:237, ten states having had a greater and twenty-seven states a less proportion of liquor dealers. However, this evidence is not conclusive as to the relative amount of alcoholics consumed.

to my aid the high authority of the Rev. Charles Kingsley, whom I honor as the highest authority on this subject, because while he equalled other preachers in knowledge of the laws to save man's soul, he surpassed them in knowledge of God's laws to save man's body. He urged,—“Let us see, in the name of Him who said that He had made the Sabbath for man, and not man for the Sabbath,—let us see, I say, if we cannot do something to prevent the townsman's Sabbath being not a day of rest, but a day of mere idleness, the day of most temptation, because of most dulness of the whole seven;” and he taught that a much needed reform was the provision for the people of more numerous and refined places of recreation on Sundays, as well as on all other days.

For such reasons sanitarians strenuously urge, as most important remedies for intemperance, first, the removal of all sanitary evils, and, second, the provision of public parks and gardens, of libraries, museums, art galleries, music halls, baths, gymnasia, good, cheap restaurants, and all other means to nourish, strengthen, and recreate body and mind. But the adoption of such measures depends upon their appreciation by the public, and on their recognition not simply as desirable, but as indispensable to the general welfare. No such practical appreciation can be secured except by disseminating amongst the public a knowledge of the laws of health as respects all sanitary evils as well as intemperance. Thus sanitation, as a remedy for the abuse of alcoholics, depends on public education.

Prohibitory Laws.—Herbert Spencer teaches, as to the efficiency of laws, that “the belief that a faulty character can so organize itself socially as to get out of itself conduct which is not proportionately faulty, is an utterly baseless belief.” History teaches the invariable lesson that laws not sustained by the moral convictions of the people, above all, those laws which require for their execution not a few officers, but the bulk of the community, cannot be enforced. A wise judge writes, that “for the enforcement of the law, we need not only persons ready to set prosecutions on foot and officers ready to serve warrants of arrest, but we need also courts and juries ready to convict on sufficient evidence, and witnesses willing to testify. For all these we must have an overwhelming public sentiment in favor of the law.” A law can do no good unless executed, and, manifestly, it will always be evaded as long as the public or those on whom its execution depends have both the *desire and power* to evade it.

Hence, prohibition, first tried in the Garden of Eden, failed there; it has failed when applied especially to alcoholics very many times since; and it must always fail of complete success, except in cases where the people would voluntarily refrain from what the law prohibits. It is notorious that neither the Maine liquor law of 1851, nor many subsequent state laws, nor any other prohibitory laws, have ever, in fact, succeeded in wholly prohibiting. However, I am inclined by personal observation to admit that while such laws have not abolished, they have tended to diminish intemperance, and to do good in two ways, —first, by increasing

the obstacles and thereby diminishing the temptations to drink; and, second, by arousing discussion, which is the great disseminator of knowledge. Dissemination of a knowledge of the evils of intemperance is the best means to foster, among those who alone have the power, the desire to enforce the law.

But even if it be conceded that these and other benefits have been conferred by prohibitory laws, there still remains the question whether there have not resulted evils which more than counterbalanced the benefits. Many wise men, lovers of temperance, urge that a great evil, the disrespect for all laws, is fostered by the repeated failures to enforce prohibitory laws; that such laws foster secret drinking and the abuse of opiates, chloral, etc.; that laws prohibiting the use of alcoholics are no more justifiable in principle than would be laws prohibiting the use of tobacco, tea, or other articles of which the abuse is injurious; and that these laws are unjust, because they punish especially liquor-sellers, while liquor-buyers, without whom there would be no liquor-sellers, go, for the most part, unpunished. The Hon. T. F. Bayard, our present Secretary of State, a pure and temperate man, and certainly one of our ablest statesmen, declares that even "local option" laws are of "very doubtful constitutionality, and positively inexpedient." The wise and temperate Bishop Magee, of England, maintains that he would rather see England free than England sober; and John Stuart Mills, for like reasons, denounced all prohibitory laws. However anxious to promote the cause of temperance, the American who rightly values his freedom is forced to question, in view of such opinions from such sources, whether prohibitory laws may not give rise to more evil than good; and his doubts are not relieved in favor of such laws when he compares temperate with intemperate nations,—say, temperate but despotic Turkey with intemperate but free England. Further, it has been forcibly urged that what mankind needs chiefly to cultivate is a virtue which can march untempted and unharmed through rows of rum-shops. The evolutionist maintains that man is a progressive animal, and, therefore, that such a virtue can be developed. Whether prohibitory laws are calculated to nourish such a growth seems doubtful.

Notwithstanding all these doubts, I find it impossible to withhold my sympathy from any laws which tend to abate the monstrous evils of intemperance, and which effect *apparently* more good than harm. I fully concur with a recent legal authority, possessed of a large judicial experience in this matter, who maintains that wise laws should attack the profits of liquor-sellers by taxing these profits to such extent as may be needful to refund the large annual expenditure out of the public treasury because of drunkenness,—such expenses as the public now incurs to prosecute drunkards, and to support them, as also those made paupers by them. And I rejoice exceedingly when I read the report that the "high license" law of Illinois did, in 1885, increase the annual revenue of the state from \$700,000 to \$4,500,000, and decrease the drinking-saloons from 13,000 to 9,000.

Further, in spite of the warnings of Mr. Bayard, and of other statesmen and philosophers, my sympathy is strongly in favor of "local option," the law which gives to a majority of any community the right to determine whether alcoholics shall be *sold* within its limits. The evidence from both England and this country seems to be conclusive, as common-sense would expect, that prohibitory regulations, adopted by a majority of a community, have been far more successfully executed than general state laws, whose purpose it is to control communities opposed to as well as those in favor of prohibition. The evidence seems conclusive also that "local option" has greatly lessened intemperance with all its evils, and contributed signally to the public welfare. From no source is this evidence more decisive and gratifying than from the South. South Carolina, Georgia, Alabama, Arkansas, Mississippi, Texas, and Louisiana are now actively engaged in the praiseworthy and apparently successful *experiment* of fighting intemperance with the "local option" law. The most notable success is claimed for Georgia, where it is reported that there are now (1880) 115 "dry" counties, and only 19 "wet" ones remaining. Although Louisiana lags behind in this race, yet in the past two years 14 of its 58 parishes are reported to have adopted the "local option" law to the manifest benefit of their inhabitants.¹

But, after all, what is the cause of the present uprising of the people in favor of "local option" and other prohibitory laws? Such laws are not recent inventions. Ever since 1855, Louisiana has had recorded on its statutes² a law fully authorizing "local option," and yet this law remained inoperative until 1884, when it was reenacted,³ without, however, adding to it anything essential.

In these facts I find conclusive proof that in consequence of a better and more wide-spread knowledge of the evils of intemperance, the moral conviction of the people has undergone a change, and that the recent triumphs of "local option" are due to the progress of the people in intelligence. The "local option" law of Louisiana had to await for thirty years the development of public sentiment. Until this development took place, the people ignored the law completely. Hence it follows that it is indispensable, if we would promote temperance by legislation, to develop public sentiment in favor of temperance.

While legislation on such subjects as the abuse of alcoholics cannot outstrip popular intelligence, yet legislation has no end more important than to promote this intelligence, which reacting on legislation will promote it in return. Thus alone can progress be secured through legislative instrumentality. On this subject one of England's greatest statesmen said that "sanitary education must precede sanitary legislation;" and three of the world's wisest men,—Milton, Bentham, and Mills,—concurred in teaching that "all the legislator can hope to accomplish is to

¹ Great reduction in the number of "assault and battery" and "murder" cases, with more stringent enforcement of law, is especially reported.

² See Secs. 1211 and 2778, Rev'd Stats. of La. 1870, and Act No. 76, pp. 98 and 99, Acts of La. 1884.

increase the efficacy of private ethics." Now the best way by which legislators can promote the efficacy of private ethics, in regard to intemperance as well as other sanitary evils, is by promoting education and diffusing information on these subjects: for the great lesson of hygiene is, that health is essential to the discharge of the duties of life, and therefore that "it is *immoral* so to treat the body as in anywise to diminish the fulness or vigor of its vitality."

Public Education. It has now been shown that of the three remedies for intemperance, two of these, sanitary reform and prohibitory laws, depend on the third,—public education. This, therefore, is the remedy which deserves the most confidence, and fortunately all lovers of temperance can unite in its behalf, however divergent their views as to prohibitory laws. There are many of the most influential advocates of temperance who have little faith in laws to make and keep a people virtuous, but who have great faith in disseminating a knowledge of the evils of intemperance, in persuading and convincing the ignorant, and in inculcating by example and precept good habits in early life.

These temperance men, though not members of any temperance party, contend with good reason that the cause of temperance was progressing prior to the enactment of any prohibitory laws in this century; that the cause is still advancing in communities and states which continue without such laws;⁴ that this progress was and is due chiefly to the progress of knowledge, to persuasion rather than to force; and that, though such progress be too slow and gradual for hopeful, tender-hearted philanthropists, yet that it is the *surest and safest*.

For my part, I fully concur with a committee of the British parliament, which, as long ago as 1854, urged, as I believe, for the first time, that in order to abate the monstrous evils of intemperance a national system of education should furnish every child "accurate information as to the poisonous and invariably deleterious nature of ardent spirits as an article of diet in any form or shape." But as important as is this lesson, hygiene inculcates so many other invaluable lessons that it constitutes one of the practically most useful of all studies. However much the ignorance, prejudice, and customs of the past have ignored it, it remains true that no instruction can be more important than that which teaches the young how to preserve the health, on which the usefulness and happiness of life depends, and therefore that this instruction should be compulsory in our public schools. Hence I have strenuously advocated the study of hygiene in all schools, and I have heartily united with many good citizens and enlightened organizations in earnestly petitioning our legislature to enact a law which would render the teaching of this knowledge, which is indispensable to the public health and the common welfare, compulsory in the public schools. If present studies overtax the pupils, as is so often objected, then let the study of the more useful laws of

⁴ Twelve such states were reported in 1885, *viz.*, California, Colorado, Florida, Kentucky, Maryland, Missouri, Nevada, New Jersey, Ohio, Oregon, Tennessee, and Virginia.

health be substituted in part for less useful studies. Although Louisiana continues without, yet in 1885 fourteen states¹ had such a law, and this was due in large part to the wise and active efforts of the Woman's Christian Temperance Union. Fortunately for New Orleans, its board of school directors took, in 1884, such efficient action in this matter, that now nothing is required for complete and permanent success except adequate appropriations to the school funds.

¹ Alabama, Indiana, Kansas, Maine, Massachusetts, Michigan, Missouri, Nebraska, Nevada, New Hampshire, New York, Oregon, Rhode Island, and Vermont.

Chaille (S. E.)

The abuse of alcoholics.

8^o. Concord, N. H., 1886.

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Chaille (Stanford E.)

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